

MOUNTAIN AGRICULTURE

Conducted by Mr. Robert F. Spence, Farm Demonstrator and Special Investigator

BEREA CORN SHOW AND FAIR

The third annual Berea Corn Show and Fair was the greatest of any yet held. The Farmers' Chautauqua which was going on at the same time attracted the crowd from the display for a time but did not interfere with the success of the show and fair.

An immense crowd gathered on the campus around the Tabernacle; some coming from distances of twenty miles or more bringing with them their farm produce for display. The corn was not as good as former years on account of the unfavorable season. Everything else on display was doubled and trebled over former years, not only in quantity but in quality as well. Where there were five plates of apples last year there were forty or more and the nicest that may be seen anywhere. The vegetable display was increased wonderfully in quality. The canned fruit display was immense and would be hard to beat for quality and beauty. The home exhibition exceeded that of former years by several hundred percent and was a great credit to those making the display. The library exhibit conducted by Berea College Library consisting of hundreds of books suitable for the farm home was certainly an inspiration for all interested in country life and its problems. The popcorn exhibit was a marked feature of the display showing what can be done with this "good of goodies." Talk about butter and corn bread; they were there in quantities and with all the quality any appetite dare crave. The poultry show was one long to be remembered; because it represented the efforts put forth by the boys and girls who have taken much interest in this line. Hurrah for the boys and girls who are taking the lead in these new lines of farming, poultry, hogs, live stock of all kinds, vegetables and the canning of the same. The pig display, and the houses for them made by the boys, was a remarkable showing for them. It looks like the old heads will have to take a back seat and let the "chaps" instruct them on livestock keeping. The farm implement display was a commendable feature and should be a prominent one at every farmer's meeting or fair. These are the things that appeal to the farmer and open the way to placing such on their farms.

In spite of Democratic speaking going on at the other end of town the crowd remained at the fair and speaking at the Chautauqua that appealed to the immediate interests of the farmer.

The winners of the prizes will be announced in these columns at a later date.

The award cards were given to all the winners; including the contestants for a better and more beautiful Berea under the able management of Mrs. Marsh and Prof. Smith who have worked untiringly this summer in the interests of the boys and girls who have been so diligent and really successful in making their town more attractive and beautiful. It was a lesson and a valuable one for them throughout the whole campaign.

Let us remember this year's fair and corn show and improve upon it next year. It pays to get together with our year's work and compare the same even if we do not get the prizes.

FARMERS CHAUTAUQUA AT BERE

It was a unique arrangement on the part of the managers of the Chautauqua to hold this important gathering at the same time that the Corn Show and Fair was on. The eyes of the visitors were not only feasted but the minds were fed equally. "Balanced rations," if you please, was the slogan of the three days at Berea. A number came to Berea for the three days and Sunday added. Talk about the farmers not being interested, it is a mistake. They know a good thing when it comes their way or they would not turn out in mass for instruction in their interests.

On account of bad luck on the road the speakers from Lexington did not arrive in time for the morning session on Thursday. The first session was held at 2:00 p. m. President Frost extended to the visitors the same warm welcome that characterizes Berea on such occasions. D. D. Slade opened the discussion on the subject of "Poultry on the Farm" which could have been made more practical for this section had the speaker been better acquainted with the conditions of this section. His answers to queries were very satisfactory. T. R. Bryant gave a very interesting and instructive talk on "Feeding Farm Animals."

He gave some very good and sound advice on the subject such that should encourage the stock men to greater things.

Friday morning was occupied by Mr. Slade who gave a very good lecture on the "Diseases of Poultry." Then followed Mr. Bryant who continued his talk of the day before and leading up to his subject of "How to Improve on Livestock" which was ably handled. Mr. G. H. Collins then tried to discuss the subject of "Farm Management" from the point of managing an eighty acre mountain farm in order that it may be a paying proposition. Mr. Collins had the sympathy of those who never lived on a mountain farm but fell short in the estimation of the mountain farmer. The afternoon was taken up by W. R. Reynolds, Dr. Simmons and Mr. Spence. The first gentleman gave a wonderfully practical exposition on the "Cropping System of Eastern Kentucky." He knows his territory and gave very valuable information in that line. Dr. Simmons in speaking on the "Diseases of Farm Animals" gave some valuable hints of how to care for and avoid many of the prevailing diseases that animals are heir to. Our County Agent, Spence, then talked to the point on "Practical Farming in the Mountains." This closed the program for the day.

Saturday in conjunction with the Corn Show and Fair was well filled. Doctor Mueller became enthused over the fine display at the Tabernacle and when he came before a vast crowd in the chapel for his morning lecture, forgot about himself and the hour and gave one of the greatest speeches of his life. We regret much that we are not able to give a verbatim report of this lecture. His subject was "Cooperation." His audience certainly cooperated with him for nearly two hours.

At 1:30 the other side of the house was heard from through the mouth piece, Miss Mary E. Sweeney, of the State University. "Home Making" was her theme and she presented her arguments for better home making in such a way as to be convincing as well as practical. Every one in the audience enjoyed the address and we hope that many will take to heart the things she said and do better in making the home a place of attractiveness and pleasure, and learn better how to prepare the food for the family. Dr. Mueller then ended the program of the three days Chautauqua by giving his lecture on "Education of the Farm Boy," which was filled with common sense and justice to the boys.

CINCINNATI MARKETS

Wheat—No. 2 red \$1.15 1/2 @ 1.16 1/2, No. 3 \$1.08 @ 1.14, No. 4 \$1.01 @ 1.05.
Corn—No. 1 white 67 1/2 c, No. 2 white 67 @ 67 1/2 c, No. 1 yellow 67 1/2 c, No. 2 yellow 67 @ 67 1/2 c, No. 1 mixed 67 1/2 c, No. 2 mixed 67 @ 67 1/2 c.
Oats—No. 2 white 42 @ 42 1/2 c, standard white 40 @ 41 c, No. 3 white 39 @ 40 c, No. 4 white 36 @ 37 c, No. 2 mixed 38 @ 39 c, No. 3 mixed 36 @ 37 c, No. 4 mixed 34 @ 35 c.

Mill Feed—Bran \$21 @ 21.50, mixed feed \$23, middlings, coarse \$24.50 @ 25, middlings, fine \$25.50 @ 26.

Rye—No. 2 \$1.01 @ 1.03, No. 3 99 c @ 1.01, No. 4 96 @ 99 c.

Hay—No. 1 timothy \$18.50, No. 2 timothy \$16 @ 16.50, No. 3 \$14 @ 14.50, No. 1 clover mixed \$15.25 @ 15.50, No. 2 \$13.25 @ 13.50, No. 1 clover \$13.25, No. 2 \$11.25.

Butter—Whole milk creamery extras 21 1/2 c, centralized creamery extras 20 c, firsts 25 1/2 c, seconds 22 1/2 c, dairy fancy 21 1/2 c, No. 1 packing stock 19 c, No. 2 17 c.

Eggs—Prime firsts 30 c, firsts 27 1/2 c, ordinary firsts 24 c, seconds 20 c.

Poultry—Broilers, 2 lbs and under, 17 c; fryers, over 2 lbs, 14 c; roasting chickens, 4 lbs and over, 14 c; fowls, 5 lbs and over, 13 c; under 5 lbs, 11 1/2 c; under 3 1/2 lbs, 9 1/2 c; roosters, 9 c; ducks, white, 3 lbs and over, 15 c; under 3 lbs, 14 c; colored, 13 @ 14 c; young turkeys, 5 lbs and over, 16 c; hen turkeys, 5 lbs and over, 16 c; old tom turkeys, 10 lbs and over, 16 c.

Cattle—Shippers \$6.25 @ 8, extra \$6.10 @ 8.25; butchers steers, extra \$7.35 @ 7.75, good to choice \$6.75 @ 7.15; common to fair \$4.75 @ 5.90; heifers, extra \$6.75 @ 7, good to choice \$6.25 @ 6.65, common to fair \$4.50 @ 6; cows, extra \$5.75 @ 6, good to choice \$4.50 @ 5.65, common to fair \$3 @ 4.25; canners \$3.75 @ 3.85, stockers and feeders \$4 @ 7.

Bulls—Bologna \$5.75, extra \$5.85 @ 6, fat bulls \$6 @ 6.50.
Calves—Extra \$6.75 @ 11, fair to good \$7.50 @ 10.75, common and large \$5 @ 10.50.

Hogs—Selected heavy shippers \$7.60 @ 7.65, good to choice packers and butchers \$7.40 @ 7.65, mixed packers \$7.30 @ 7.60, stags \$4.50 @ 4.50, common to choice heavy fat sows \$6 @ 6.75, light shippers \$6.55 @ 7.10, pigs (110 lbs and less) \$4 @ 6.75.

Measure of Happiness.

A woman is happy when she thinks she is better looking than the lady cashier at the downtown cafe where her husband gets his lunches.—Portland Telegram.

DAIRY

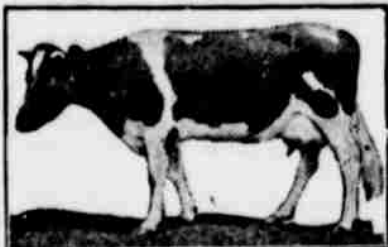


MISTAKE TO CHANGE BREEDS

Start With the Kind Liked Best and Stick to It—Cull Poor Specimens and Buy Better Ones.

To change breeds every now and then is poor practice. One should be very careful before the particular breed is chosen. To use a Holstein sire one year in order to obtain a large flow of milk, a Guernsey sire another year to secure richness of milk, and a Shorthorn sire the next time, is the wrong principle to employ in the breeding and raising of good cows. Undoubtedly some good cows will be obtained in the herd from such methods of procedure, but there will be no uniformity of size, form, appearance and production, and the owner has no assurance of what he is going to get in the future. It is a case of too many in the mixture, and it is guesswork as to which one will come to the top.

First, select the breed with great care, then stick to it. If a mistake is made the first time in obtaining poor specimens and poor producers, then rectify the mistake as soon as possible by selecting the right kind of a sire belonging to the same breed to head the herd, or by selling the animals



Typical Dutch Milker.

already bought, and purchasing better individuals belonging to the same breed.

It is usually safer to try to improve within the same breed than it is to improve by changing to a different breed. There are good individuals and good strains within any of the breeds intended for a particular purpose.

INFLUENCE COLOR OF BUTTER

Markets Demand Yellow Tint Which Is Supplied by Use of Dyes or Character of Cow's Feed.

Although it is a fact that some dairy breeds give yellower milk than others, even though it may be no richer in fat, the thing of greatest influence in color is the kind of feed the cows are getting. Market demands call for a yellow butter, which is supplied in the creamery by the use of certain harmless vegetable dyes, the use of which dairy laws rightly permit. The color also can be fed into the milk and make the use of dyes unnecessary. Carrots, for example, color milk and cream quickly. One of the natural coloring materials in milk and butter is called carotin, from carrots, and this material is found in many food materials. It is plentiful in fresh green grass, hence the milk colors up well in early spring. Alfalfa hay, cured to have a bright green color, contains good supplies of carotin, which appears in the cream as a result.

Hay which has lost this green color, dry corn fodder, silage, straw, yellow corn and white, wheat, yellow bran, cottonseed meal and other milled feeds contain practically none, and cream from cows so fed will produce a light colored butter unless artificial coloring is supplied. The color adds nothing to the value or digestibility of butter, save in one's mind, but the market demands a yellow butter all the year round and the color must either be supplied in the feed or in the creamery.

SEPARATION OF SOUR MILK

Pour From One Pan to Another, Breaking Up Curd as Fine as Possible—Prevents Clogging.

Milk that has curdled will separate with difficulty. Such milk should be thoroughly mixed previous to separating, by pouring from one can into another. In this way the curd is broken up as finely as possible, so that it will not clog the machine. The separation of curdled milk finally clogs the skim-milk tubes, with the result that more skim milk passes through the cream outlet, making a thinner cream.

On the other hand, when sour milk which has not curdled is separated, the cream produced will be thicker. This is due to the fact that cream from sour milk has a high viscosity, or is less fluid, and a smaller proportion of cream is delivered, containing a higher per cent of fat.

Ordinary Cow Stalls.

The ordinary cow stalls should be five feet long from the stanchion back to the gutter. This is the standard distance and does for all except abnormally large or small stock. The width of the stall varies somewhat with the breed and size of the cows, from three feet four inches to four feet. Three feet eight inches is a good average.

Deepening the Farm For Bigger Crops

The Third Dimension of the Farm an Important Factor to Greater Crops and Bigger Dividends.

WISE farmers are beginning to realize that a farm goes farther than length and breadth. Depth is a vital factor, and incidentally this third dimension has a clearly identified influence upon the producing value of the earth's surface.

Thus "vertical farming," a newer method of agriculture, is rapidly developing. Merely to scrape the bristles from a hog's hide is not enough. Deeper cutting is essential in order to reach the bacon. And experience has shown that to simply plow or turn the top soil is very often only the scratching of the surface when it comes to bumper crops.

Often the productivity of a farm is limited by the tight clay or hard pan underlying the top soil. Costly implements for tilling this upper soil and

taking care of increased horizontal or surface acreage are all right in their way, but to go deeper into the farm, to increase its fertility and productivity by increasing its depth, is a matter that the practice of vertical farming accomplishes quickly and economically, and very often a single cartridge of explosive will convert several yards of otherwise useless subsoil into half an acre of new root feeding surface. Thus, instead of spreading out and embracing more territory, vertical farming enables the farmer to really concentrate and by intensive methods conserves in both labor and expense. At the same time the resulting increase in crops emphasizes the profitable features of the process.

And there is a practical reason for this. By breaking up the subsoil oxygen is admitted into the ground, and the pent up natural fertilizing elements

of the lower soils are released and utilized. A reservoir for the storage of water is created, and a good home for the roots is produced. Good roots are essential to good plants. Men who look below the surface realize these facts. They know also that a plant produces only in proportion to the extent of air, water and nourishment given its roots. Thus is the newer method of vertical farming both logical and profitable.

This method of farming vertically is in itself easy, simple and labor saving. A half cartridge charge of farm powder placed well down into the tight subsoil at intervals of about a rod, tamped properly and fired carefully will do the work quickly and economically. Subsoil blasting, however, can be done successfully only when the subsoil is dry. Few tools are required for the work.

USING CONVICTS ON HIGHWAYS

Many States Have Abolished Contract System of Working the Prisoners

WORK CONVICTS ON ROADS

Kentucky Could Possibly Save From Twenty to Thirty Per Cent of the Money Expended For Road Work on the Public Highways Says Commissioner Terrell.

Frankfort, Ky.—(Special)—R. C. Terrell, Commissioner of Roads, when asked for his views regarding the employment of convicts on the roads of the state, granted the following interview on this subject:

"In recent years the convict labor problem has been one that has been given a great deal of attention, and prison reforms have brought about a study of conditions as they exist, with a view of how they could be bettered, and as a result, most of the States have abolished the contract system of working the prisoners and have established the more modern system of using the convicts on the public highways, and in the prisons for the purpose of preparing materials for the highways, and on other public works in the various States. Reports from various Highway Departments over the United States show conclusively that convict labor can be used to an advantage in road building and at a saving of both to the county and State in the cost of labor for this class of work."

"In the biennial report of Mr. T. F. Tynan, Warden of the State Penitentiary of Colorado for the year 1912, it is shown that there was built one hundred and fifty-seven miles of road through the mountain sections of that State, at a saving, according to his estimate, of \$223,479.56; that the average cost per day per man for the laborers engaged in this class of work was 32c. He further states that the convicts were able to do the work of not only ordinary laborers, but some were found able to perform the services required of experienced men in drilling, blasting, laying masonry, black-smithing, and other skilled labor. With such labor commanding a salary of from \$2 to \$5 per day, this without a doubt, shows that convict labor can be used to advantage on heavy construction work, and in places where more or less permanent camps can be maintained."

"Virginia also has succeeded in this undertaking, as is shown by the results. For the past nine years convicts have been used on the public highways of this State, and Mr. P. St. J. Wilson, former State Highway Commissioner, and now the Assistant Director in the United States Office of Public Roads at Washington, D. C., stated that more than 1,500 men were used on the public highways of Virginia in the year 1913; that from forty to seventy-five were grouped together in a single camp—separate camps being maintained in each county—and that the cost of clothing and feeding them, and general maintenance of the men was 52c per day for a period of three years; that the men were not specially selected, but that the road forces were made up of prisoners as they were presented at the prisons; that men who were physically weak, or even cripples, were often sent out as part of the road force. He further states that the contractors who contracted for the work had very frequently offered \$1 per day for men furnished by the State."

Under our present system in Kentucky the State receives the magnificent sum of 75c per day per man employed under contract, and the State is required to feed and clothe the prisoners and a great many of the prisoners are let at a lower figure than that stated above.

"Kentucky could possibly save from twenty to thirty per cent of the money expended for road work under the State aid plan, if the convicts could be used on the public highways, and in the preparation of the materials which go into the highways. It would be possible to establish semi-permanent camps in the various counties where limestone is available in large

quantities and prepare this material for road building, ready to be delivered by rail or motor truck to roads under construction, and these camps could be maintained practically the entire season."

"In Edmonson County, Kentucky, there exists an unlimited deposit of rock asphalt, which is a hard sandstone—the finest road making material known—containing from seven to nine per cent of bitumen or asphalt base. This material has an overburden of from ten to twenty feet of soil, sand or rock, and lies in a horizontal strata of from six to twenty feet in thickness. Would it not be a fine thing to establish here a permanent convict camp, where they could be used in the stripping of this material, quarrying and pulverizing and loading it ready for shipment to the counties of the Commonwealth? The actual cost of production, or even a reasonable per cent of profit could be charged by the State for the material, and at the same time very materially reduce the cost for use in road construction, and insuring to the counties for their limestone, macadam, or other hard surfaced roads, a splendid, long life surfacing material, that is dustless, noiseless, durable and at the same time waterproof. Other camps might be established for the purpose of preparing limestone as stated above, and still others for the manufacture of brick to be used in the surfacing of roads, and a very efficient organization might be had for the placing of concrete roads as is now being used in Illinois, Georgia, and other States where that type of road is being constructed."

"The men become skilled in the performance of their duties, and this, while preparing them for a better existence when they have completed their term, also reduces the possibility of breaking up the organization by men quitting. Another important factor to be considered is the reduction of the cost, the reducing of the cost making it possible for all the counties in the state—not merely the rich counties—but practically all of them, to construct permanent roads. When one stops to consider that there are one hundred and twenty counties in Kentucky, most of them having a road fund ranging from \$500 to \$5,000, while less than ten have a road fund of more than \$20,000, it is quite an easy matter to understand the advantage that convict labor would furnish these counties, where funds are limited, in the securing of permanent types of road."

"The convict labor would not come in competition with free labor, for without it the counties would be compelled to build a cheaper type of road, and in many instances would not be able to build at all, while with the convict labor, better and more durable types of road could be constructed, as well as a more durable type of bridges. Even in the fabrication of steel material for the longer span bridges these could be obtained at a much cheaper figure, with the convict labor, than they could be done by contract."

"In summing up the advantages to the counties and to the state, one should not overlook the big advantage to the convict himself—the wholesome out-of-door labor—bettering him, mentally, morally and physically—a much more healthy occupation than that which he would find inside the prison walls."

PREVENT HOG CHOLERA

Disease Is Greatest Menace to Successful Swine Raising.

By Far Most Contagious and Fatal of Any of Allmen's of Animals—Infection Carried to Healthy Herds in Many Ways.

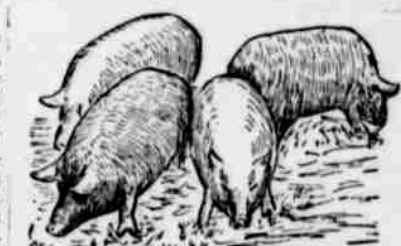
(By J. KASTLE and R. GRAHAM.) Hog cholera is the greatest menace to successful hog raising. It is by far the most contagious and fatal of any of the diseases of swine. The disease is due to an ultra-microscopic virus which is present in the blood, the excreta and in the carcasses of all infected animals. The infection may be carried from infected to healthy herds by a number of agencies, such as running water, birds, dogs, new stock from infected sources, and also on the shoes of persons who have walked over infected areas. We can only hope to control, and ultimately eradicate hog cholera by honest, conscientious and painstaking efforts on the part of all farmers and hog raisers looking to the effective isolation of all animals having the disease, scrupulous cleanliness in the handling and care of hogs, disinfection of infected premises, the burning of all carcasses of hogs that

have died of this disease, proper care in the selection of fresh stock and the careful and intelligent use of hog cholera serum.

Hogs should be fed a balanced ration consisting of such materials as corn and various corn products, bran, wheat middlings, oil meal, tankage and distillers' dried grains and, whenever possible, they should be supplied with forage crops, such as green alfalfa or alfalfa hay. Hogs should be supplied with an abundance of pure, clean water, plenty of shade in hot weather, dry bedding, and airy, light, well ventilated hog houses.

Great care should be exercised in the purchase of new stock in order to secure healthy, vigorous animals, free from disease. In this connection, it is well to bear in mind that hog cholera has an incubation period lasting from 5 to 20 days, during which time the animal may appear normal to all intents and purposes. Separate quarters should be provided for the isolation of all newly-purchased animals, where they may be kept from the rest of the herd for a period of three weeks, and kept under observation for any symptom of the disease that may appear.

Following an outbreak of hog cholera in a herd, a thorough cleaning up and disinfection of hog lots and quarters must be resorted to. Fire and fresh air-slaked lime are the most efficient agents for the destruction of



Hogs Isolated While Being Watched for Cholera Symptoms.

hog cholera virus. Scatter fresh air-slaked lime abundantly about the hog lots or disinfest with a 3 per cent solution of creosol compound and white-wash the hog houses and fences. Sick hogs should not be sold; neither should they be driven along public highways or transported in cars from place to place, or placed in public stock yards or pens. In other words, the only way to properly control this disease is to isolate it, and though it may work a temporary hardship on the individual owner to do this, it is certainly, ultimately, to his interest and to the interest of the great body of hog raisers, to do all in his power to establish and maintain a rigid and effective quarantine with respect to this disease.

SOME ECONOMIES IN HARVEST

Considerable Portion of Grain Crop Lost in Field by Help Neglecting to Pick Up Scatterings.

(By A. D. WILSON.) It is possible for careless help to leave a considerable portion of the grain crop in the field by neglecting to gather up scatterings, loose bundles, etc., and by hauling grain on open-bottom racks.

From a few pounds to a few bushels of grain may be saved every day, during stacking, by using a tight-bottom rack, or a canvas over the rack that will catch all of the grain that is shattered out of the heads.

In seasons when the grain shatters badly, a surprisingly large amount of grain can be saved in this way.

Value of Coal Ashes. Coal ashes, it is believed by many because of their favorable effect on many soils, possess considerable fertilizing value. As a matter of fact coal ashes contain only traces of fertilizing constituents. The good results from their use is due to their loosening or lightening effect on heavy or clay soils.

Studies Feed and Land. The dairy farmer not only studies how to feed his cow but how to feed his land. He is not a soil robber, as he realizes that the farmer who reduces the fertility of his land robs without reason, since he steals from himself.

In Bootlaces. Estimate the distance carefully are you try to negotiate it.—Boston Record.